



**2012 COMMUNITY EXCELLENCE AWARDS
Category Worksheet**

**LEADERSHIP & INNOVATION
Climate Action**

Name of Local Government: District of Saanich

**Project/Program Title:
Saanich Community Carbon Fund Leads to Science in Action**

Project Summary Paragraph

Using the Saanich Carbon Calculator, local residents have contributed to the *Saanich Community Carbon Fund* (CCF) in support of local climate action projects. Designed to be an offsetting alternative, residents use the carbon calculator to measure their carbon footprint and then contribute to the Fund based on \$25 per tonne of greenhouse gas (GHG).

The first program funded by this innovative program is a successful pilot involving two local middle schools participating in a partnership program between the District of Saanich and WildBC. *Science in Action* provides training and support to middle schools to promote active science education and overall healthy living. Student learning was supported through teacher training and curriculum resources. The program also encouraged groups of students to “take action” either by initiating or continuing action projects that enhanced awareness and/or reduced the school’s carbon footprint. The result was two excellent school projects created by the schools themselves.

Project Analysis

Please answer the question in 300 words or less in 11 pt Arial font (our judges value directness and brevity). If you experience difficulty answering a particular question, consider the aspects of your program that may relate to the question and show us how they are linked.

1. CLIMATE

Please describe how the program/project contributes to the achievement of one or more of your [Climate Action Charter](#) goals:

- i. Corporate carbon neutrality:
- ii. Using your community energy and emissions inventory:
- iii. Creating complete, compact, energy efficient rural and urban communities:

Saanich was one of the first BC municipalities to sign on to the BC Climate Action Charter in 2007 and since then, has shown a consistent commitment to those goals. In 2010, Saanich set 2020 climate action targets to reduce greenhouse gas emissions 33% in the community and 50% in municipal operations based on 2007 emission levels. These commitments were highlighted within the Saanich Official Community Plan.

Section (1)(e) of the Charter highlights an understanding that “governments urgently need to implement effective measures to reduce GHG emissions”. Saanich believes this means efforts must be made on all fronts if we are to succeed. The Municipality’s approach has been to achieve reductions in community emissions goals in a gradual and consistent way. Actions are based on a combination of support for technological improvements and the encouragement of community behavior change. The challenge for all municipalities is to change the ‘norms’ in the average Saanich home without resorting to lecturing residents. A significant opportunity lies in two segments of the

community where residents spend a significant amount of time; adults at their place of work and children at school. There are many energy saving and sustainability initiatives being explored at schools and workplaces through a variety of drivers, and this has great potential to transfer sustainable practices back to the home. Over the last two years, Saanich has supported the Climate Smart program, which will help to improve the climate action practices of more than 30 businesses in Saanich. Through the Community Carbon Fund, Saanich is now supporting local schools with climate action curriculum resources for teachers and student led projects. This type of program will greatly assist us in achieving our community emissions reduction goals.

2. PROCESS

The Community Carbon Fund (CCF)

The CCF is supported by funds donated by residents who are taking responsibility for their carbon footprint. Carbon footprints are determined using the Carbon Calculator. The process for residents to contribute to the CCF is as follows:

1. Connect to the Carbon Calculator via the Saanich website: [Carbon Calculator Website](#)
2. Calculate personal household emissions (tonnes of GHG) using information from utility bills, vehicle information and yearly travel data.
3. Make an online donation to the CCF based on \$25 per tonne of GHG.
4. Receive a contribution confirmation via email, in the form of a tax deductible receipt.

The money contributed to the CCF directly funds climate action related projects in Saanich. The selection of applicable projects posed a challenge as it is important to identify a project that provides a community climate action benefit while at the same time being fiscally feasible.

The WildBC Science in Action project was chosen for these reasons. It is estimated that between the two schools, the Science in Action project had the potential to connect with more than 60 Saanich households.

Science in Action Program

1) School Delivery

A request was made to all middle schools within the Saanich municipal boundaries and 2 schools elected to participate in the project. Each school received the following:

- 4 Hour Workshop(s) for school staff
- In-class Support and Networking
- Resources (School Kit)

2) Action Project

Action projects were selected by the school's based on student interest and funding opportunities.

3) Evaluation

The evaluation plan for the project included a pre-workshop survey, a workshop evaluation, in-class tracking, and post evaluation.

3. RESULTS

Tell us how your submission addresses climate change issues in terms of reduced GHG emissions and /or supports your community to prepare for the impacts of climate change.

The potential power of changing sustainable behaviors is immense. The CCF has the potential to create significant reductions, but in many cases we will not be able to accurately measure their

impacts on the community inventory. However, these types of programs can address some of the barriers to emissions reductions and cannot be discounted.

This first project with WildBC and the Science in Action program started in 2011 with two successful engagements with middle schools in Saanich. Each school benefited from training for educators and climate action kits.

Arbutus Global Middle School Action Project
Wheeling & Walking Wednesdays!

One of Arbutus Global Middle School's action projects focused on what students could do to lessen their carbon footprint. Throughout May, students and staff got on their bicycles, scooters, or skateboards, put on their rollerblades or walking shoes, and took public transit on "Wheeling & Walking Wednesdays". Over 150 students met the challenge each week by traveling to school using green transportation. Other action projects included the naturescaping of two inner courtyards, with students planting native species, and vegetables and flowers in raised beds.

Lansdowne Middle School Action Project
Naturescape in Action!

A partnership between a range of organizations including WildBC and Saanich, Lansdowne Middle School's action project was the creation of a Naturalized Play Area on the south side of the school. The project started with asking students for input, gathering their drawings and ideas for this "green space" and then finding the common themes to develop an overall plan. Students and staff enjoyed planting a variety of indigenous species - from Red Elderberry, Common Camas, Salal, Sword Fern, Oceanspray and Oregon Grape. The next phase will include planting indigenous trees and installing rustic cedar benches and pathways.

4. LEADERSHIP

How does the project reflect leadership and excellence in the advancement of climate action?

Saanich was the first municipality to establish the concept of the Carbon Fund for municipal operations. Since 2008, the municipality has required all departments to contribute to the Fund on an annual basis, based on their energy related emissions. These contributions are prominently reported in annual municipal financial plans. The CCF is an evolution of this concept, adapted for the community.

Saanich recognized early on that there is a significant challenge for communities to find local climate action projects that can be supported by residents. If residents want to take responsibility for their carbon footprint, they can purchase offsets from several different organizations including credible offsets from the Pacific Carbon Trust (PCT). However, there are no projects currently available with municipal or even regional boundaries. For many residents, there is a strong desire to invest back into the sustainability of their community and the CCF has the potential to address these concerns.

By providing another option for residents to take responsibility of their carbon footprint, the CCF helps to support all types of carbon reduction projects including other carbon offset projects. The CCF should be viewed as a complementary option to verified carbon offset projects that are both working towards the same goals. The Fund also encourages residents to become more familiar with the carbon discussion and may assist them in their day-to-day energy consumption decisions.

Saanich also showed leadership by effectively partnering with a WildBC team that has extensive expertise in environmental education programs for schools in BC. The next section explains this benefit further.

5. ECONOMICS

a. How was the project a good use of budget and resources?

In total, the public has contributed \$4500 since the Carbon Calculator was first developed 4 years ago. It is anticipated that this will greatly increase with greater exposure and by offering a greater selection of programs that residents could contribute to.

Residents who contributed to the CCF, expected value and quality for their contributions and this project has delivered as promised. Community contributions led directly to these community climate action projects.

The Science in Action program was identified as ideal for its potential for long-term impacts in the community a reasonable cost. The experience of the WildBC team provided a high level of value to the project. Building on a proven and effective education model (Science in Action) the program implementation was extremely smooth. Many teachers in the region have a strong familiarity with other WildBC programs and this resulted in immediate buy-in from the start.

b. How does the project encourage economic sustainability? (e.g. life cycle analysis, internalizing costs and alternative financing, economic instruments)

The CCF supports economic sustainability through support for energy conservation within the community by helping residents to recognize the true cost of their energy and fuel use. The CCF is a similar economic instrument to the BC carbon tax which puts a price on carbon emissions to encourage individuals to use less fossil fuel and reduce their greenhouse gas emissions.

The fund also produces a source of alternative financing for sustainability and climate action programs that are facing significant financial challenges over the last 4 years. Specifically, the WildBC program also supports a sustainable education system by ensuring that curriculum is kept relevant to the issues of the day.

6. ENGAGEMENT

How does the project encourage engagement? (e.g. stakeholder engagement, public participation, equity and diversity, knowledge sharing, capacity building, community identity and marketing)

There are three ways that the CCF process encourages engagement with residents, stakeholders and other communities:

Carbon Calculator Use

The carbon calculator provides residents with an opportunity to gain knowledge and understanding of impact of their transportation and building energy choices. It is a personal process that will result in a different output and experience for each resident. Through online public participation, the calculator shows how different types of energy produce varying levels of emissions. This in turn builds capacity and overall community knowledge so residents can make informed decisions in the future.

Impact of WildBC Program

Engagement is the entire basis of the Science in Action Program. Teachers initially worked in groups and were able to provide feedback on how so they could shape their curriculum for the coming year. The teachers then engaged their students over the school year and student were able to help identify projects that they wanted to work on in their schools.

Knowledge Sharing

The CCF is firstly an educational tool. It gives residents an opportunity to understand the concepts behind the carbon footprint and within the Science in Action program. Lessons have been learned

from this initial pilot that will then be used for other school programs. This program will continue into the 2012/2013 school year.

7. INNOVATION

What makes your program/project innovative?

This is the first program of its kind in BC. No other project has provided residents with this unique alternative to carbon offsetting. While several different types of carbon calculators had already been developed by 2008, none of them have been connected to a community based fund operated by a municipality. By providing an easy to use, web-based technology, residents can easily access this tool. Saanich hopes to eventually develop this calculator into a smart-phone application to increase uptake.

8. TRANSFERABILITY

How is this program/project transferable to other local governments?

While every municipality is different, they all face similar challenges and questions about energy use and carbon emissions. 176 of 188 communities in BC (94%) have signed on to the BC Climate Action Charter, highlighting the province-wide commitment to community emissions reductions and an opportunity for new solutions.

Saanich originally developed the Carbon Calculator in 2008, and has been sharing the website source code with other municipalities. Saanich has delivered this content to the Municipality of North Cowichan which uses an [earlier version](#) of the calculator on their website today. The information was also shared with the City of Oshawa in Ontario. Saanich hopes more municipalities will begin to use carbon calculators and will continue to share the information with any other municipality that is interested.

9. KNOWLEDGE SHARING

What helpful advice would you share with other communities looking to embark on a similar project?

There are several steps that should be considered when establishing this kind of program.

Financial

There are some upfront costs for the developing the calculator, but there are no costs related to establishing the CCF. The CCF is part of a Reserve Fund as defined under Division 4, Sec 188-189 of the BC Community Charter Act. When setting up this Fund, and the web-based functionality, the Finance Department is an integral part of developing this program.

Council and Community Commitment

For a program as innovative as this, it is important to have a strong commitment to climate action from municipal Council and the community as a whole. Support for sustainability initiatives has been consistent in Saanich for decades, but a strong commitment to climate action was shown by the community and Council during the development of the updated Sustainable Saanich Official Community Plan (OCP) in 2008. This proved to be a driving force behind the success of the project thus far.

Information Technology Support

As previously mentioned, Saanich originally developed the Carbon Calculator in 2008, and has always offered the source code for the website to other municipalities. The Municipality of North Cowichan uses an [earlier version](#) of the calculator today and the City of Oshawa has also received a copy for their own use.

10. TELL US MORE

Please share any other information you think may help us better understand your submission.

Building on this early success, the program will be expanded this year to allow for additional community based carbon reduction projects. A tree planting program is currently being considered as another community based project funded by money contributed to the CCF. The CCF is still a developing and ongoing process that Saanich staff continues to develop over time with the input from residents.

Saanich has also provided two Climate Action updates with this submission. These are used to communicate climate action success stories to residents and municipal staff.

UBCM